

Abstracts will be published exactly in the form and condition submitted by the author. Every error which appears in the submitted abstract will appear in the printed abstract. Each author must therefore prepare his/her abstract with extreme care. PLEASE READ THE INSTRUCTIONS ON PAGE 5 CAREFULLY BEFORE PREPARING YOUR ABSTRACT. REFER TO THE SAMPLE ABSTRACT ON THE RIGHT FOR THE PROPER FORMAT.

*REBER
only*

The final stages of the process seemed incompletely described in your letter, Grote, but I did the best I could.

SOUTHWESTERN AND ROCKY MOUNTAIN DIVISION, AAAS
72nd Annual Meeting Flagstaff, Arizona 2 - 6 June, 1996

ABSTRACT FORM

Complete and return this Abstract Form no later than 31 January 1996. Please follow the directions for preparation of abstracts on page 5 carefully. Your typed original, which will not be edited except for length, will be our camera-ready copy. Please circulate this Announcement and Form or a copy thereof to your students and colleagues who may not receive the Announcement (sent of all AAAS members in the geographical SWARM Division and to cosponsoring societies). Additional copies are available from the Executive Director of the Division at the address on this page or from any officer of the Division (see page 8).

Abstract submitted for the Phys. Sci. Section/Symposium
SWARM Division, AAAS, Annual Meeting

Name of Author (if Co-Authors, please indicate presenter) Grote Reber

Address Michael St., Bothwell, Tasmania 7030

AUSTRALIA Telephone () (None)

STUDENT PAPERS: To be judged for award Yes No

Level: Undergraduate Masters Doctoral

Faculty Sponsor _____

Permanent Address and Telephone Number of student: _____

Telephone () _____

AV equipment required other than 2x2 slide projector or chalkboard (See instruction No. 6, Instructions for Submitting Papers) Overhead projector

smooth surface by evaporating solvent (acetone) from a polymer solution. These are two untested hypotheses explaining the growth of macrovoids. One states that diffusion of the non-solvent (water) is solely responsible, while the other states that solutocapillary convection is the primary cause for macrovoid growth. Solutocapillary convection is flow caused by a concentration induced surface-tension gradient. Macrovoid growth in the former hypothesis is gravity independent, while in the latter it is opposed by gravity. To distinguish between these two hypotheses, experiments have been designed to cast membranes in zero-gravity. A semi-automated apparatus was designed and built for casting membranes during the 30 secs of zero-g time available in parabolic aircraft flight such as NASA's KC-135. These studies appear to be the first quantitative studies of membrane casting in micro-gravity which incorporate real-time data acquisition.

HOW THE UNIVERSE WINDS ITSELF UP. Grote Reber, Michael St., Bothwell, Tasmania, Australia 7030.

Many scientists who take the Second Law of Thermodynamics too seriously keep asking why the entire universe has not "run down" long ago. An answer is suggested with the help of an idea that is superior to the expanding universe concept in explaining why red shift in light from distant galaxies increases with distance. It makes more sense to argue that as they travel through space, photons interact with free charges by Compton transitions, thus losing energy. The lost energy appears as pulses of radio frequency, more abundant at longer wave lengths (See G. Reber in *J. Franklin Inst.*, 1-12, Jan. 1968). Having been derived ultimately from regions of high density and temperature where one may indeed accurately say that things are "running down," this steadily accumulating long wave radiation then tends to accumulate in other regions of space characterized by low density and low energy, and it is in this process of accumulation and increasing density that the universe finds a way to "wind itself up" again. The process is analagous to what happens in a motor of a type I built over 40 years ago, which runs on electrostatic forces, converting low-grade electrical energy of several types into high-grade mechanical energy.

This seems incomplete. (But the whole idea is still convincing.)

FINAL VERSION OF FLAGSTAFF PROGRAM

(OFFICIAL PAPERS ONLY)

(INITIALS IN LEFTHAND MARGIN SHOW WHICH CHAIR WILL INTRODUCE SPEAKER.)

(DAYTIME SESSIONS: 1996)

* = NOT EXPECTED TO ATTEND
□ = ONLY PAPER

[9 AUTHORS WITH A TOTAL OF 8 PAPERS HAVE BEEN DROPPED FROM EARLIER VERSIONS OF THE PROGRAM—MOSTLY AT THEIR REQUEST OR BECAUSE OF THEIR SILENCE.]

ALL AUTHORS WITH 2 PAPERS RECEIVE

A TOTAL OF 40 MINUTES; AUTHORS WITH 1 PAPER RECEIVE 25 OR 30 MINUTES—EXCEPT WHEN SPECIAL REQUESTS OR CIRCUMSTANCES MAY VARY TIME BY 5 MINUTES MORE OR LESS.

[PERCENT OF TOTAL SESSION TIME TAKEN BY DISCUSSION SHOWN ALONG MARGINS.]

MONDAY (3 JUNE)

TOTAL PROGRAM HAS 47 PAPERS & 32 AUTHORS, INCL. 26 ATTENDING, (Plenary sessions till 10:30)

Series title: NEW FRONTIERS IN PHYSICS AND COSMOLOGY

Series Intro: KIEREIN 5

I. Philosophy, History, and Reinterpretation

Chair: SHIMMIN

CHAPPELL 1.	20	[23.8%]
MUNCH 1.	20	-15-
MCCAUSLAND 1.	20	
RENSHAW 1.	20	-10-
85		-25-

10:30-12:20 (110 MINS.) Morning

II. 1:30-5:30 (240) afternoon Cosmology & Astronomy

Chairs: MARMET, LOVE

M WALKER 1.	20	[25.0%]
M KIEREIN □	25	-15-
M REBER □	25	-15-
M MOLNÁR □	30	-10-
L WOLFF 1.	20	
L HENDERSON 1.	20	-10-
L CARTER 1.	20	
L RENSHAW 2.	20	-10-

TOTALS: 180 -60-

MINUTES FOR PAPERS →
MINUTES FOR DISCUSSION ↗

5:45-7:00 (75 MINS.) evening

III. Suppression of Innovative Thought in the Academic World

Chair: CHAPPELL. (SPECIAL SESSION)
Joint presentation by DEMEO, CHAPPELL, GUNNUFSON, SPENCER, AND LOVE. —to be followed by Discussion.

[A MORE DETAILED SCHEDULE, WITH TITLES, AND WITH ALL INDEPENDENT SESSIONS, WILL FOLLOW.]

TUESDAY (4 JUNE)

IV. The First Postulate of Special Relativity

Chair: MUNCH (PANEL)

XU* & XU* 1.	15	[40.9%]
MCCAUSLAND 2.	20	
SPENCER, SHAMA, MANN* 1.	15	
SHIMMIN 1.	15	
65		-45-

V. The Complex Realm (10) of Aether Theory BREAK

Chair: CHAPPELL

RADO 1.	25	[25.0%]
WALKER 2.	20	-15-
MÜLLER 1.	20	
DEMEO 1.	25	-15-
90		-30-

8:00-12:00 (240) morning

1:30-5:40 (250) afternoon

VI. The Electromagnetic Aether; What, How, & Whether

Chair: KIEREIN (PANEL)

HENDERSON 2.	15	[40.9%]
DEMEO 2.	15	
RADO 2.	15	
SHAMA & SPENCER □	20	-45-
65		

VII. Fields, Photons, & Aether

Chair: HATCH (10) BREAK

SHIMMIN 2.	25	[19.2%]
SILLIMAN 1.	20	
LOVE 1.	20	-15-
CUNNINGHAM 1.	20	
CUNNINGHAM 2.	20	-10-

[DISCUSSION FROM VII & VIII CAN CONTINUE INTO EVENING SESSIONS.] 1105 -25-

5:50-6:30 (40) evening

Independent session: EXTRA DISCUSSION, AND ANNOUNCEMENTS

[TUE. & WED. EVE. SESSIONS CAN LAST LONGER IF ATTENDEES WISH.]

WEDNESDAY (5 JUNE)

VIII. Experiment, Theory, and Technology

Chairs: MCCAUSLAND, DEMEO

A. Predictas. & Observs. in thermodyns.

M MELEHY □	25	[22.2%]
M CARTER 2.	20	
M HATCH 1.	20	-15-

C. Reinterptg. Fundamentl. Expts.

M SPENCER, et al 2.	25	
D CHAPPELL 2.	20	-15-

D. Applics.: New Energy Sources

D MÜLLER 2.	25	
D DAVIDSON □	30	-15-
D FOX □	30	-10-
195		-55-

8:00-12:10 (250) morning

1:30-5:40 (250) afternoon

IX. From Quantum to Cosmos

Chairs: RADO, RENSHAW

RD KONTROL* & SZABO*	20	[22.2%]
RD SILLIMAN 2.	20	
RD GUT* & CHAPPELL □	20	-15-
RN WOLFF 2.	20	
RN LOVE 2.	25	-15-
105		-30-

X. The Lorentz Trans- (10) formation: Pro & Con BREAK

Chairs: CUNNINGHAM, RENSHAW

RN HATCH 2.	20	[19.0%]
C MARMET □	25	-10-
C MUNCH 2.	20	
C XU* & XU* 2.	20	-10-

85 -20-
+ IX: [20.8%] 190 -50-

5:50-6:30 (40) evening

Independent session: EXTRA DISCUSSION, AND ANNOUNCEMENTS

[All chairs are given this role on days when they have no papers to read that might distract them from chairing.]

You can take only 15 mins. if you wish; then discussion will be longer.

Grote - If you haven't arranged for your \$40 registration fee to be sent yet, don't send it to me or to the SWARM office; send it to JOHN KIERIN,

1212 Drake Circle, San Luis Obispo, CA 93405

1837 W. Redfield Rd.,
Gilbert, AZ 85233. He

5 Feb. 1996 as our

To all Contributors to the Flagstaff meeting:

new treasurer

Enclosed with this letter is a handwritten chart of the final schedule, which was sent to Donald Nash at the SWARM office with all abstracts, forms, etc. after I got permission for a further delay, necessitated by an unusually high proportion of late and incomplete submissions. The greatest problem these created was not having to xerox extra forms, or to revise, abbreviate, or even virtually compose some of the abstracts, but many hours of very uncomfortable worry, involving devising alternate schedules in case this or that author dropped out. But out of this came at least one advantage: the schedule has now been so thoroughly pondered and intricately planned, it is hard to imagine how the papers could be more appropriately grouped and placed.

has
sent
\$40
on your
behalf
to
SWARM
(to be
returned
if your
check
reaches
them
soon).
Take
care
-John
C. Jr.

Despite having 46 daytime papers compared to 34 in Norman, and having space for only 4 of them on the Monday morning we did not utilize there, by starting at 8 a.m. twice and ending well after 5 p.m. each day, we have about as much discussion time for regular papers (19 to 25% of total session time) as we did in Norman, and even more (41%) following the briefer panel papers. Both sessions with less than 22% occur just prior to evening discussion sessions, in which their carryover discussion can continue. These evening sessions are brief, but anyone wishing can stay longer. Extra papers and miscellaneous discussion can now be moved to Thurs. or Fri., making unnecessary the long Tues. evening sessions, starting after dinner, held in S.F. and Norman. Now we can relax at dinner and still retire early enough to start at 8 a.m.

Those attending early evening sessions may not have time to attend the dinners offered by the dorms as part of a package price. As I wrote before, the dorms are a considerable distance from the meeting rooms; and I have since learned they are also an uphill-downhill walk--no flat terrain as in Norman. So it won't be very convenient to go there for lunches either. For all these reasons, I reemphasize that you are all advised to wait until March to reserve housing. Dorm rooms won't run out by then, if you really want one, and in early March we plan to send you special recommendations for motel lodgings, whereby informal discussion can be facilitated by concentrating in just one or two places. (Anyone can, as the SWARM newsletter says, write for food and housing info to Flagstaff Visitor Services; or call them at (800) 842-7293.)

Supplementing what is printed on the program about length of time for papers: 30 minutes goes only to special visitors, from abroad and from the new energy movement (Reber wanted less than 30). Müller and Love requested 25 minutes for one of their papers. Henderson generously asked for only 20 and 10 minutes for his two, but was given the (eventual) minimum of 15 for the second. Shama has 20 mins. because that is the maximum for any panel paper. Xu and Xu at first had only one 20-minute slot, the planned maximum for *in absentia* authors, but another abstract they sent was used after all, to fill in for a very late withdrawal, and 35 minutes seems an appropriate total for both. Discussion breaks are never less than 10 minutes, but as in Norman we can move about 5 minutes of this time ahead, to just after any paper not followed immediately by a discussion break, if the need occurs. Don Nash has allowed us to make Session III not just an independent session as originally planned, but a plenary session, listed on the program--during the usual time for dinner, true; but also at a time nothing else is scheduled. It may be our best chance to reach a wider audience.

Any abstract which I revised more than a small amount (e.g., by adding a comma or correcting spelling) is being enclosed here for the author. If there is any drastic need to correct an error (it's too late to add new material) in any abstract, phone me at once at (805) 544-0400, ext. 104, 8 to 10 a.m. or 9:30 to 11 p.m., PST.

More will be said in detail later about exchanging papers and abstracts prior to the meeting. The more of this occurs, the more we will all profit from the meeting.

And remember: Please send titles and ideas for the several independent sessions to me so that I get them by the end of February (topics listed in earlier mailings).

Keep well. See you in Flagstaff! Sincerely, John C. Jr., John Chappell, Jr.

P.S. Arrange your flights & ground transportation with John K. No doubt he will be glad to drive you from Phoenix to Flagstaff.

11 Mar. '96

Dear Grote - We're wondering why no word from you lately. Get in touch with me or Kierein about reserving a room. Hope you are well. (The \$40 fee should now go to the NPA treasury, c/o Kierein - no huge rush.)

1212 Drake Circle, San Luis Obispo, CA 93405

FOURTH REPORT TO CONTRIBUTORS TO THE JUNE 1996 FLAGSTAFF MEETING

(Although it was not numbered as such, my letter dated 5 Feb., about the official sessions, sent with a chart of such sessions, will be considered the Third Report.)

Hostility from N.A.U. Physicists. A somber note has just been sounded in the form of news from SWARM Executive Director Donald Nash that the Physics Dept. at Northern Arizona Univ., the site of the Flagstaff meeting, has objected to our presence on the program. We have not met this degree of hostility from the establishment at any of our previous AAAS regional meetings; in fact in Norman one physicist, Jack Cohn, encouraged our presence. Nash, still tolerant himself, calmed them by agreeing to list us not as an integral part of the SWARM program but as an adjunct event. He says we'll still get the same prominent publicity in his April newsletter that we got last year. So now we must be more wary, and be extra-careful to do our best; and I suggest we should be ever ready to tell the world that apart from any scholarly issue, the extreme intolerance displayed by academic physics is a major scandal that should be held up for the world to examine.

More on this issue will be included in our own next newsletter, also due in April.

Overall Emphasis of Our Flagstaff Meeting. Trying now to get back on a hopeful note, let's remind ourselves of what we decided in Norman, and have reaffirmed since, about our goals for this 1996 meeting: We want to **increase the attention we give to each other's ideas**, and get out of the rut that most scholars are habitually in, of just putting one's own ideas on display and then closing one's mind. To this purpose our official program contains for the first time 2 panel discussions, with over 40% of its time scheduled for open discussion; and all contributors to these are asked to send their short papers (at least an early draft of same) to everyone else in the panel, including the chairman, **by about 8 May**. It seems reasonable to allow others at least 3 weeks to study these. If a full draft is not available, send a summary or at least an abstract (We will not see the full set of official abstracts until meeting time; most of the copies I have have little typo corrections, etc. scribbled on them; SWARM will retype everything). One other session for which I would like to ask all contributors to send copies in advance to everyone else therein, including the two chairs, is **Session X.**, which involves serious differences of opinion on the Lorentz transformation; this ought to help liven up this session and make it, as our final Wednesday session in Norman was, a strong conclusion for this part of the program. Anyone else who wants to send papers, summaries, or abstracts to others in his/her session is encouraged to do so; if this cannot be done prior to the meeting, it would still help to do it at the meeting, a day or more earlier than the given session.

Minor Changes in Official Sessions. Some very slight revisions have been made in the program for these, since the handwritten schedule sent in Feb.: 5 minutes more discussion time has been added in sessions VII., VIII., and X.; and 5 subtracted from I. Now we have a uniform pattern of paper groups totaling 45 to 60 mins. having 15 mins. discussion time following them; those with less, 10 mins.; and those with more, 20 mins. Kierein and Munch exchange chair's roles, and Chappell replaces Kierein in introducing the meeting, so as to compact Kierein's contributions into less than 24 hours, in case a likely heavy work schedule then forces him to attend the meeting only briefly. The title of X. is altered to make Marmet's paper fit it better, and the last 2 papers in X. exchange positions, so that Munch can speak just prior to a long discussion period. A complete final schedule, with all titles, will be distributed in April in the SWARM newsletter, and possibly in our April newsletter also; if you want a copy prior to then, just ask.

Titles of *in absentia* papers on the official program that still need readers are: John Kontrol and Charles Szabo (both in Belgium), "Challenging the Contemporary Principles of Quantum Mechanics: the Wave-Particle Duality". Also Xu Shaozhi and Xu Xiangqun (both in Beijing, China), "The Illegitimate Lorentz Transformation." Both are on Wed. afternoon. As with our other *in absentia* papers (See below), full copies of these should be in the hands of their readers **before the middle of May**--even earlier, if possible, so as to allow time for the extra effort that will probably be needed to improve the English.

Printed 12/3/96. \$54 Rec'd 25/3/96

Take care. -John C. Jr

Our Extra Independent Sessions. On page 3 of this report is a handwritten chart giving the preliminary program for these sessions. Originally I envisioned only about 15 papers, long reading times and long discussion breaks, a late morning start on Thursday, and a leisurely pace throughout. But it turns out we have 30 papers, mostly due to an unexpectedly heavy response to invitations for *in absentia* papers. This is actually good news; papers from absent authors help us to expand our horizons even further, and this is our first chance to schedule them without limit--even though restricted time and space force me to hold them to 1 per author (2 for those in official sessions). Keeping these contributions open until ca. 1 March has also enabled us to add 4 new, very interesting **attending** authors, all of whom joined in the last few days. This too is very good for us; but we do now need to compact reading times, and begin once again at 8 a.m.

It also means we need to find quite a few **readers for the *in absentia* papers**. I urge everyone who plans to attend these extra sessions--and I sincerely hope a large majority of you will do so, since their quality looks to be at least as high as that of the other sessions--will consider it a duty to volunteer for at least one such paper. Let me know of your interest in same as soon as possible. We will send out abstracts for such papers to all contributors, hopefully by mid-April; but I will have some before then, and will send them to any interested person. We want to have **full texts** for such papers in the hands of the readers **before the middle of May**, to give them plenty of time to familiarize themselves with what they will be reading. Keep in mind that **20 minutes is the strict maximum** for reading time for such papers, including such discussion as the reader is able to cope with (Readers will not necessarily be expert in the topic); authors would do well to aim at a few minutes less than 20, to allow for whatever discussion may be generated.

Rules for Abstracts: *To facilitate our printing them up, these abstracts must be short: between 50 and 100 words. Longer abstracts will be pared down, perhaps not very expertly. All abstracts must be in my hands by 5 APRIL. If you live abroad, contact me by Neil Munch's email, 70047.2123@compuserve.com, telling him to forward your message to me at once. It will be very difficult for me to do much phoning to urge people to be on time; so please take the responsibility yourself. Titles without abstracts will be dropped from the schedule. Almost no leeway is available, if we are to print up and distribute abstracts by mid-April; and we need to do so by then, to help attract readers for those papers still lacking them, early enough to have the finished paper sent to such readers in early May. So it is in the interest of every author to meet this deadline.*

You could **phone** in your abstract: my temporary number is (805) 544-0400, ext. 104. But it is very important to call between 8 and 10 a.m. or 10 to 11 p.m., since at other times I may be out or there may be no clerk or an incompetent one in this motel office (Just now, as I was typing, a call came in and was lost as the substitute clerk messed it up--at ca. 1 p.m.). Second most favorable times are late morning and 8 to 10 p.m.

Our Thursday and Friday extra sessions will be held in the Travelodge conference room, where we will have on hand an **overhead projector** and screen. We will probably not have a slide projector there; but we are likely to have one at our Sunday session, probably in a room at NAU (So I placed Francisco Müller, who often uses slides, in that session).

Illustrations: Authors of *in absentia* papers are asked to place all their illustrations and all their complex equations (assembled from various places in the paper) as compactly as they can on the fewest possible number of ordinary pages (8½ x 11", or A4), and to make from these pages **film transparencies** that can be shown by an overhead projector. For those abroad who can't easily make transparencies, we will do our best to make them here. All print should be large enough to read from 30 feet away.

All written material (in **double-spaced** format) and illustrations for *in absentia* papers should be sent to me, unless or until I give the address of a reader. Always print "FIRST CLASS" prominently on large envelopes. Do not register anything, and sign the signature-**waiver** box on express mail, so that I don't have to sign for it--since I am rarely there when mail arrives (I live elsewhere), and the need to sign may delay it.

Placing a paper in the last session often makes its author unhappy. Six papers are on the Friday morning program, when attendance will no doubt be lower than previously, and

FLAGSTAFF 1996. NPA SESSIONS RELATED TO SWARM MEETING.

Preliminary Schedule of Independent Sessions:

SUNDAY 3-5⁴⁵ P.M. [165 MINS.]
(2 JUNE) AT N.A.U.

A. SIMULTANEITY AND LOGIC
Chair: I. McCAUSLAND (?)
J.C. EDWARDS [n]. THE KINEMATIC FALLACY IN SPECIAL RELATIVITY.
P. MARMET. DISSECTING "RELATIVE"
C. RENSHAW. \ SIMULTANEITY."
SIMULTANEITY WITH AND WITHOUT THE 2ND
J. CHAPPELL, JR. \ POSTULATE.
THE EVANS CRITIQUE ON SIMULTANEITY.

B. ELECTRODYNAMICS EXPERIMENTS
Chair:
F. MÜLLER. THE SEARCH FOR AN ABSOLUTE MOTION GENERATOR.
J. KONTROL & C. SZABO [n]. EXPERIMENTS SHOWING THE BALLISTIC CHARACTER OF LIGHT.

THURSDAY 8 A.M.-12⁴⁵ P.M. [285 MINS.]
(6 JUNE) AT MOTEL

C. AETHER, GRAVITY, INERTIA, & MORE.
Chair: R. HATCH (?)
J. HODGES [n]. FROM TWIN PARADOX TO N. MUNCH. \ AETHER THEORY.
A NON-LORENTZIAN AETHER.
L. SHIMMIN. THE LORENTZ THEORY OF GRAVITY.
J. LEE. NON-LINEAR TIME MOTION AND THE CAUSE OF GRAVITY.
D. DEHILSTER. AUTODYNAMICS: A COMPREHENSIVE REPLACEMENT FOR SPECIAL RELATIVITY.
R. NEISWANDER [n]. INERTIAL SYSTEMS AND THE DOMAIN OF SPECIAL RELATIVITY.

D. REINTERPRETATION OF "TIME DILATION" EXPERIMENTS
Chair: J. CHAPPELL, JR.
D. SPENCER. THE HAFELE-KEATING EXPT.
C. RENSHAW. (?) HAFELE-KEATING, POUND-REBKA, ETC.
P. MARMET. THE NON-REALITY OF TIME DILATION.
J. CHAPPELL, JR. HOW MESON LIFETIME "DILATION" DEPENDS ON UNPROVEN MASS VARIATION; THE IVES-STILWELL EXPTS.

ATTENDING AUTHORS RECEIVE 25 MINUTES IF THEY HAVE NO PAPER IN OFFICIAL SESSIONS; 20 MINUTES IF THEY DO. IN ABSENTIA PAPERS GET 20 MINS. EXCEPTION: 25 MINS. FOR PAPERS ON NEW EXPERIMENTS.

[n] = PROBABLE NON-ATTENDING AUTHOR.
(?) = UNCERTAIN CONTRIBUTOR OR TITLE.

Sessions for Discussion Only:
t. SUNDAY 11³⁰ a.m.-1³⁰ p.m. at KETTLE RESTNT.
X. TUESDAY 5⁵⁵-6⁴⁰ p.m. at N.A.U.
Y. WEDNESDAY 5⁵⁵-6⁴⁰ p.m. at N.A.U.
Z. WEDNESDAY 8³⁰-11 p.m. at MOTEL

THURSDAY 2-5⁴⁵ P.M. [225 MINS.]
(6 JUNE) AT MOTEL

E. AETHER AND MAGNETISM
Chair: F. MÜLLER (?)
E. KELLY. ANOMALOUS PROPERTIES OF THE MAGNETIC VECTOR POTENTIAL ILLUSTRATED BY THE AHARONOV-BOHM EFFECT.
S. RADO. MAGNETISM AND THE IDEAL GAS MODEL OF THE AETHER.
H. BONILLA. IS THE AETHER THE REASON FOR THE EXISTENCE OF MAGNETISM?

F. THE EVOLUTION OF 20TH-CENT. NEO-NEWTONIAN PHYSICS
Chair:
D. SPENCER. MID-20TH-CENTURY NORTH
J. CHAPPELL, JR. RECENT \ AMERICA.
NORTH AMERICA; AUSTRALIA; USSR.
N. MUNCH. RECENT WORK IN RUSSIA.
G. GALECZKI [n]. (?) WESTERN EUROPE, ESPECIALLY GERMANY.
F. MÜLLER. (?) LATIN AMERICA AND FLORIDA. (?)

FRIDAY 8³⁰-11³⁰ A.M. [180 MINS.]
(7 JUNE) AT MOTEL

G. COSMOLOGY, "C", COORDINATES, AND
Chair: \ CARBON
J. MASTERSON [n]. DISCOUNTING THE BIG BANG.
R. FRITZIUS [n]. THE POSSIBLE NON-COSMOLOGICAL NATURE OF QSO'S.
R. DRISCOLL [n]. SAGNAC EFFECT: ISOTROPIC LIGHT SPEED IN THE Co-
R. HANNON [n]. \ ROTATING FRAME.
ON THE VELOCITY OF LIGHT.
J. HASSLBERGER [n]. TETRA SPACE
H. MILNES [n]. \ COORDINATES,
ON CARBON BONDING.
CONCLUDING DISCUSSION.

(COMPILED EARLY MARCH, 1996)

DISCUSSION TIME IN SESSIONS A-F. WILL AMOUNT TO 22-25% OF TOTAL SESSION TIME. IN INDEPENDENT SESSIONS: TOTAL PAPERS, 30; TOTAL DIFFERENT AUTHORS, 23; TOTAL NON-ATTENDING AUTHORS, 11; TOTAL AUTHORS NOT IN OFFICIAL SESSIONS, 14 (OF WHOM 5 CONTRIBUTED TO EARLIER NPA MEETINGS).

unless some authors of earlier papers drop out, I'll most likely keep them there (although I am open to pleas for rescheduling). Clearly it makes more sense that no **attending** author be scheduled at this time, if we have 11 *in absentia* papers. The best I can do is to point out at various earlier times in the meeting that these final papers include some of the strongest material in the entire meeting, as I honestly believe they do. One such time will be at the very start of the Sunday session, when we will tell listeners that we have placed *in absentia* papers by the 2 editors of the earliest and longest-running dissident physics journals in North America as bookends around the entire meeting: Chris Edwards, who for many years put out the *Quarterly Journal of the British-American Scientific Research Association (BASRA) [now ceased]*; and Harold Milnes, who from 1982 until very recently edited *The Toth-Maatian Review*. Chris's paper comes early because it deals with special relativity, of interest to all of us; and Harold's comes late because his chosen topic is remote from the interests of most of us--which says nothing of its high quality. Also, copies of Friday papers will be offered for distribution earlier.

Note that we will attempt to distribute, to SWARM attendees in general, full schedules for our independent sessions; and to attract some people to them verbally as well.

Policy on Distributing Copies of Papers. In the April newsletter we will announce an address in Arizona where copies of papers can be mailed, by either *in absentia* authors or by attending ones who do not want to carry them all en route. By all means do not send any such copies to me, and do not send anything until this address is announced.

Attending authors may distribute any number of any length of manuscript, and even materials not directly related to the papers they read, if they bring them with them or mail them to the announced address. They will also have chances to sell their writings.

Non-attending authors who live within North America will be expected to mail all copies they wish to have distributed, to the announced address. We ask them to restrict their mailings to the papers being read for them, or to a version not much longer; but we will consider requests to make other handouts. Those who live outside North America are asked to mail two clear and readable copies, and the NPA will pay to have further copies made. If the paper is short, readable in 20 minutes, we will probably make ca. 28 or 30 copies--enough for all in our group. Longer papers will have fewer copies made. For all *in absentia* papers, we will offer 3 copies bound only by a paper clip, and allow anyone to take 2 of them at a time away to make xeroxes, while the 3rd is kept in the room.

All papers mailed for copying should be single-spaced, unlike copies sent to readers which should be double-spaced. Papers not single-spaced will have fewer copies made.

A few dissidents are asking that their papers be distributed only, and not read. If we have abstracts for these by 5 April, we will print them along with the others, to help stimulate interest in the papers. The policy for sending and making copies of such papers is the same as for scheduled papers. The limit is one paper per author.

Publicity. Between now and June we'll be making new kinds of efforts to attract publicity to our cause, including announcing our meeting on the Internet. Feel free to make efforts of your own in this area; but please clear with me any text aimed beyond local media.

An upcoming TV event has an unexpected connection to our cause: a 5-week series on PBS-TV, starting 26 March, wherein Bill Moyers interviews Huston Smith, world-renowned expert on comparative religions. Smith is probably the most famous of all academicians who support our cause; he hasn't done so yet publically, but in several conversations with me since 1990 on my visits to Berkeley, he has heard and responded with approval to my line of argument vs. modern physics, now believing that it parallels his own struggles against relativism in philosophy and religion, and against "scientism" in all fields. He may yet help us mount an effective assault from without on dogmatism in physics.

Note that our 3 letters critical of the article on us in *The Scientist* of 15 May 1995 will finally appear, rebutted by a physicist, in the issue of 18 March 1996.

Abstracts and final schedule for the extra sessions, plus added info, will be sent in mid-April. Take care. Sincerely,

John E. Chappell, Jr.

Grote -

1212 Drake Circle, San Luis Obispo, CA 93405

Flagstaff meeting (June 1996): HOUSING, FOOD, AND TRANSPORTATION

Because of an unusually inactive NAU local arrangements chair, we've had to make decisions on housing plans without knowing much at all about the dorm situation, and we even lost ca. 4 days in getting this mailing out, waiting in vain for details. Yet we went ahead anyway, and made what looks like an excellent deal with the Travelodge Motel, which offers us a bonus of 2 free days in their conference room.

FLAGSTAFF AND VICINITY. Fortunately, no human factor can dim the natural grandeur and fine climate of the Flagstaff area. The only possible disadvantage would be its high elevation, ca. 7000 feet above sea level, which might make it advisable for those with health problems to arrive a day or two early just for acclimatization. Well, if the nearby Grand Canyon (80 miles to the NW) is more than a mile deep, as it is, the land around it has to be more than a mile high. The elevation has at least one big advantage: it greatly moderates potential summer heat, compared to the "low desert" to the S of the Mogollon Rim escarpment. Average daytime highs in early June are pleasant, ca. 75° F. This is the driest part of the year; rain is very unlikely.

Among numerous scenic attractions which can be visited in half a day or less from Flagstaff are: (a) a huge meteor crater, 50 miles E; (b) cliff house ruins in Wupatki National Monument, 35 mi. N just off Hwy. US-89; (c) gorgeous Oak Creek Canyon, along Hwy. US-89A on the way to Sedona, 30 mi. S of Flagstaff; and (d) Jerome, a semi-ghost old mining town, on a hillside 30 mi. SW of Sedona. (See enclosed partial state map.)

MOTEL ACCOMMODATIONS. Because we'll be in a prime tourist area at high season, and motel space is scarce, prices are rather high, and weekly rates tend to be suspended for the summer months. So it seems fortunate we were able to find the deal we did, at the large, nearly new Travelodge at 2520 E. Lucky Lane, Flagstaff, AZ 86004--on a sort of "motel row" near the intersection of I-40 and E. Butler Ave. (located on the enclosed partial city map). This is ca. 2 miles east of the SWARM meeting rooms, but we should have more cars than in Norman, where we stayed about this far away. Our special rate will be only \$42 per night (regular rate is \$50)--not much more than the \$34 to \$39 we paid in Norman--at a time when nearly all motels charge \$65 to \$110.

The same rate applies for either 1 or 2 people in the room. Rooms contain either 1 or 2 beds, all of them queen size, and are comparatively large as motel rooms go. They have tubs as well as showers, and of course a color TV and phone (local calls are free). Small pets are accepted for a \$20 refundable deposit. The motel has a coin laundry, an indoor spa, and an outdoor heated pool; and it offers FAX services.

There are no kitchenettes, but some refrigerators are available, on still-uncertain terms: they might cost \$5 extra per day, or might be free as part of our group deal. You might be able to rent a microwave too, but very few of these are on hand.

Yet we are being offered as part of our deal the free use of a conference room, seating from 50 to 75 depending on the set-up, for a 48-hour period, which I asked to extend from early Wed. evening to Fri. afternoon; and amazingly, this room comes complete with a bathroom and even a kitchen, with stove and microwave. And the very agreeable manager, Napoleon Salinas (who sounds not at all like the dictator or seedy Steinbeck character his names remind one of), offered to move the large refrigerator in his office into this kitchen while we use it. Thus we can store food and fix some of our own meals. But there are no dishes or utensils; so I hope that 2 or 3 people who drive to Flagstaff will volunteer to loan us some pots, pans, etc.; paper plates, etc. we can get locally. (We can also rent this room for added days at \$45 per day.)

The closest restaurants are ca. 2 blocks to the W: a Denny's, and an eatery in a Holiday Inn. Ca. 2 blocks farther W, at 2200 E. Butler, is The Kettle--another branch of which we frequented in Norman (Our extra session "t." on 2 June will be here).

The Travelodge has reserved for us 10 rooms on the night of Sat., 1 June; 24 for every night from 2 through 5 June; 20 for 6 June; and 4 for 7 June. We have until 10 May to reserve them. This must be done by each guest phoning directly to the

motel at (520) 779-5121, or writing to the address above. Refer both to the Natural Philosophy Alliance and to my name, Chappell. You may reserve for any days from 1 through 7 June; but if you do so only for days after 2 June, you may have to remind the clerk that all reservations were made to start on either 1 or 2 June. If needed, ask for Mr. Salinas, the manager, or his assistant Helen. Normally you will pay for the first day in full by credit card--including 9.05% tax, this will be \$45.80; payments for additional days will be arranged after you arrive. You may also pay by check or money order, but be sure your payment arrives by 10 May. If you need more help because you live abroad, or for any reason, please ask me or Neil Munch.

When reserving, say whether you want a room with 1 or 2 beds. The 1-bed rooms have couches, and so are more suitable for small meetings. I asked for all rooms to be non-smoking, near each other, and mostly on the first floor. Check, or vary, any of these conditions when reserving. Napoleon said it is possible we might get the special rate if reserving after 10 May, or if we need rooms in excess of 24; but this will depend on how heavy the demand is. So don't take a chance. reserve early, by 30 April if possible. There is a great advantage in maximizing our communication by staying in one place, and with the conference room thrown in, we have a fine deal.

This Travelodge deal requires that at least 15 of us rent there; so I hope a large majority of you do so. Yet with 4 new extra-session speakers now coming, our main problem may be overflow space. For this I reserved 10 rooms at the Motel 6 right next door, at 2500 E. Lucky Lane: 3 rooms on 1 June, and 10 from 2 through 7 June. These are all small, with only 1 bed, and cost \$39.99 plus tax per night; \$6 more for 2. Call the motel at (520) 774-2249, by 18 May, mentioning the NPA and my name.

The cheaper of the 2 motels offered by SWARM is the Days Inn at 1000 W. Hwy 66, only ca. 0.6 miles W of the meeting rooms, at \$49 per night (regular group rate is \$63). For anyone wanting more elegance, closer restaurants (one is inside the motel), a large lobby, and walking access to NAU, this isn't a bad deal. But there are no kitchens or fridges, and no free meeting rooms. You need to specify "out and down" if you want a first-floor room near your car; many rooms face a courtyard and pool. Ask for Andrew or Gianna if you need help. They agreed to extend the time to make reservations from 1 April to 13 May. Just identify yourself with SWARM.

For kitchenettes, you might call the National 9 Inn, 1008 E. Hwy. 66, at (520) 774-7356. I'm not sure of details, but prices will probably exceed \$70 per night.

DORMITORIES. With a local arrangements chair much less helpful than the one we had in Norman, Don Nash has had to send a colleague to Flagstaff to make a deal for dorm space. But we still don't know exactly what dorms will be used (most likely, ones well over a half mile S of the meeting rooms); where meals will be taken (probably roughly half way between these 2); how much privacy will be available; and whether the cited \$44 rate is per person with 2 to a room, or per room. It isn't even sure yet that meals will be or must be included. But some money can probably be saved by staying in dorms, and the deadline will probably extend past 1 Apr. Call Neil Munch, or Steve Rado (noon to 6 p.m.), for details; they will have them, or direct you to me.

RESTAURANTS. Another favored eatery in Norman, Furr's Cafeteria, also has a branch in Flagstaff, at 1200 S. Milton Road near University Dr.--near a long string of fast food places. Several restaurants are on San Francisco St. both N and S of Santa Fe Ave., including Cafe Express (16 N. San Francisco), which emphasizes health foods.

TRAVEL. Several airlines fly into Phoenix, 140 miles S; and Las Vegas, 250 miles W. America West, often with low prices, flies from most large eastern cities directly to Flagstaff (airport ca. 3 miles S of town); our group can provide you with free local transportation. PLEASE LET ME KNOW ALL DETAILS OF YOUR FLIGHT RESERVATIONS, YOUR PLANS TO DRIVE YOUR CAR OR RENT ONE, AND YOUR ROOM RESERVATIONS, as soon as you know them; this will facilitate cooperation among us, and probably help you.

Good luck, and travel safely. Sincerely, *John C. Jr.* John E. Chappell, Jr.

STAFF URBAN TRAIL SYSTEM

FLAGSTAFF, ARIZONA

(Elevation ~7000ft.)



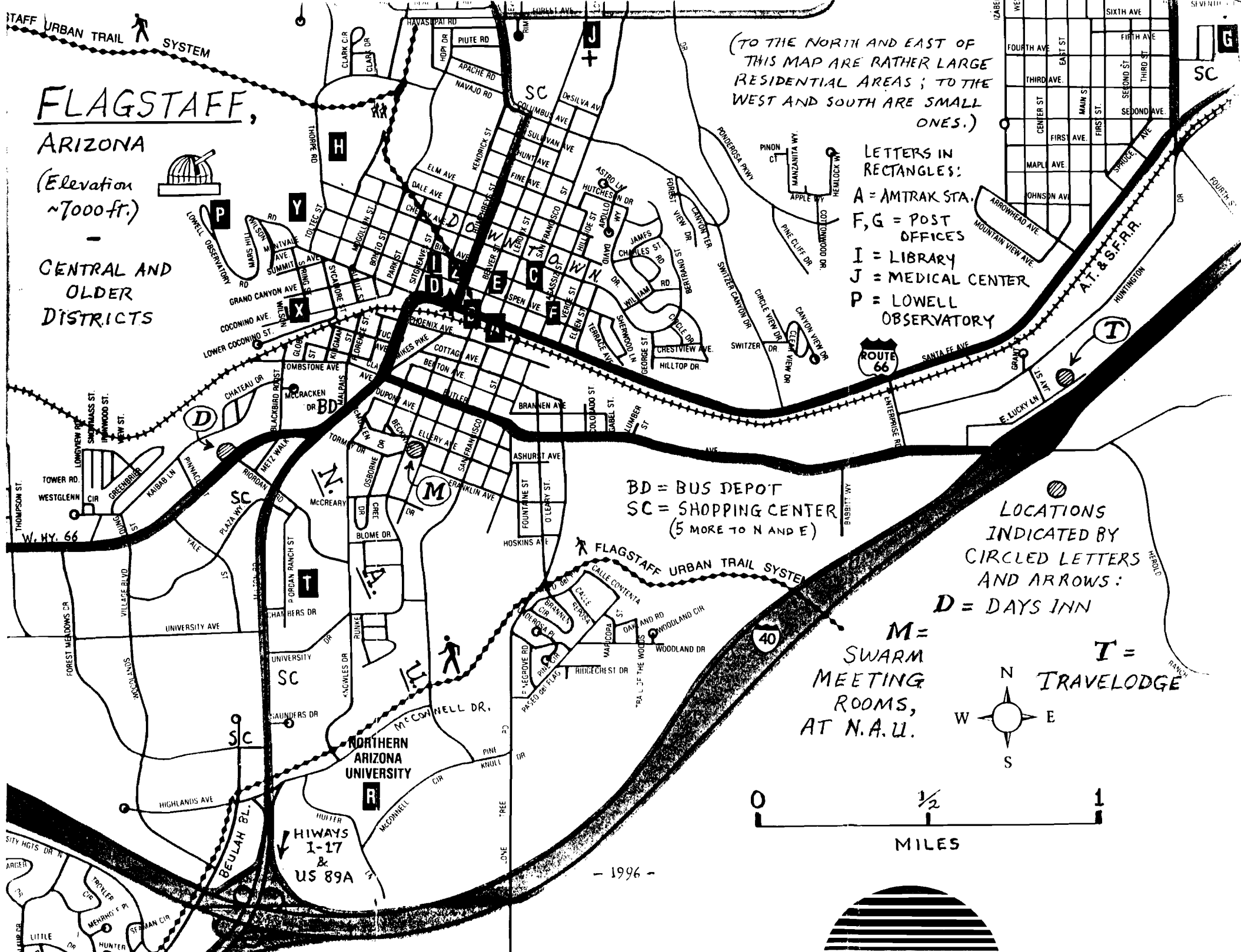
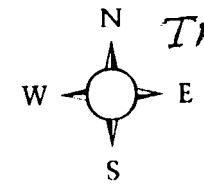
CENTRAL AND OLDER DISTRICTS

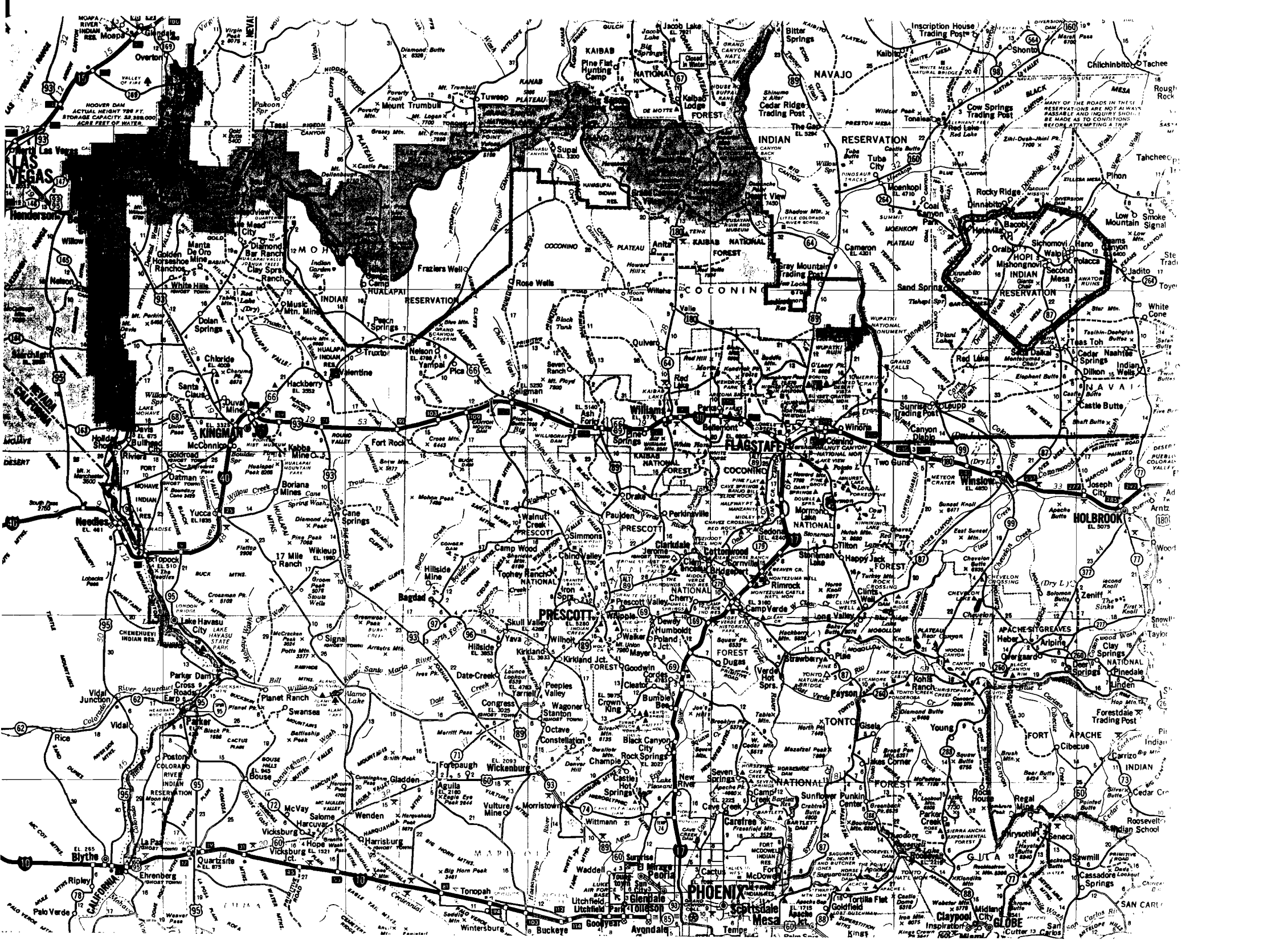
(TO THE NORTH AND EAST OF THIS MAP ARE RATHER LARGE RESIDENTIAL AREAS; TO THE WEST AND SOUTH ARE SMALL ONES.)

- LETTERS IN RECTANGLES:
- A = AMTRAK STA.
 - F, G = POST OFFICES
 - I = LIBRARY
 - J = MEDICAL CENTER
 - P = LOWELL OBSERVATORY

- BD = BUS DEPOT
 SC = SHOPPING CENTER
 (5 MORE TO N AND E)

- LOCATIONS INDICATED BY CIRCLED LETTERS AND ARROWS:
- D = DAYS INN
 - M = SWARM MEETING ROOMS, AT N.A.U.
 - T = TRAVELODGE





Neil's sharper-printed version of this is being handed out in Baltimore by 2 or 3 of our group
(AAAS national meeting, Feb. '96)

NEW FRONTIERS in PHYSICS and COSMOLOGY

at the FLAGSTAFF REGIONAL AAAS MEETING

JUNE 2 to 6, 1996

11 Mar 1996

Development of a new, rational and objective physical science is now occurring at regional meetings of the American Association of the Advancement of Science. The fourth since 1994 in a series of meetings challenging much of contemporary doctrine in physics and astronomy will be held June 2-6 in Flagstaff, Arizona, along with the 1996 meeting of the Southwestern and Rocky Mountain Division of the AAAS. These dissident sessions, titled "New Frontiers in Physics and Cosmology," are sponsored by the Natural Philosophy Alliance, whose formal members number over 80, from 12 nations. More than 50 papers will be presented in this NPA program, several in extra sessions independent of the main SWARM meeting.

Among currently-held theories that these speakers will strongly criticize are Big Bang theory and special relativity theory. Most of them maintain that no evidence cited on behalf of either theory is more than equivocal in meaning, and often the meanings taught in current texts result from invalid logic. The current paradigm seems to have been chosen for some non-scientific motive--as Kuhn has shown to occur often in science. Accepted literature already contains the seeds of alternative approaches; e.g., relativistic mass variation has since 1987 been cast into considerable doubt.

NPA speakers in Flagstaff will include Grote Reber, who in 1937 built the world's first radio telescope, and has consistently maintained "the Big Bang is bunk!" (Reber appeared at two NPA meetings in 1995.) Also Domina Eberle Spencer, mathematician at the Univ. of Connecticut and author or co-author of many papers presenting Gaussian-Weberian alternatives to today's fashionable Maxwell-Lorentz-Einstein electrodynamics (most published prior to the heavy censorship of all Neo-Newtonian physics that began in the journals about 1960), will present her latest findings. Francisco Müller of Miami will announce recent experimental work contravening special relativity. Widely-known consultant on the Global Positioning System Ronald Hatch will illustrate how data from this source contradict, rather than support, special relativity. Ian McCausland, electrical engineer from the Univ. of Toronto, will explore flaws in special relativity from historical and philosophical perspectives. Others, including Thomas Love of Cal. State Dominguez Hills, will offer new ideas in quantum physics.

These U.S.-based efforts have actually been tardy compared to those of dissident scholars in Europe, who have been holding major meetings since 1982, culminating in the 1994 conference in St. Petersburg, Russia, with over 170 papers on the program. In Sept. of 1996, Russian organizers will try to outdo that achievement by holding 2 full weeks of meetings, the sponsors of which will include the Russian Academy of Science. Since the 1980s, major dissident physics and cosmology meetings have also been held in Greece, Poland, Germany, Italy, and elsewhere. Notable individual efforts include recent public lectures highly critical of special relativity, to audiences of several hundred, by A. G. Kelly in Dublin, Ireland.

Those who wish to learn more about the NPA and the Flagstaff meeting may write to the NPA's Director, John Chappell, Jr., at 1212 Drake Circle, San Luis Obispo, CA 93405; or to its Liaison Officer, Neil Munch, 9400 Five Logs Way, Gaithersburg, MD 20879 (Telecommunications should be directed to Munch: (301) 926-3728, or via e-mail to 70047#2123@compuserve.com). Munch can also give information about the Sept. meetings in Russia.

Posted? \$1.00, Reber 14/2/96